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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,924	10/23/2003	Eric M. Foster	EN920020004US2	1592
30400 7590 08/31/2007 HESLIN ROTHENBERG FARLEY & MESITI P.C. 5 COLUMBIA CIRCLE ALBANY, NY 12203			EXAMINER ABEDIN, SHANTO	
			ART UNIT 2136	PAPER NUMBER
			MAIL DATE 08/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/691,924	Applicant(s) FOSTER ET AL.	
	Examiner Shanto M Z Abedin	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-23 and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/23/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the communication filed on 10/23/2003.
2. Claims 1-28 are currently presented for the examination.
3. Claims 1-10, 13-23 and 26-28 have been rejected.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-6, 14-19 and 27 are provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 4, 6, 9-13,17, 19 and 22-26 of the commonly owned US Patent 6715085 B2.

Patent US 6715085 B2	Instant Application
Claim 4:initialization code to be employed in initializing secure operation of the integrated system	1: A method of initializing secure operation of an integrated system, said method comprising:
Claim 6: ... encrypting the decrypted initialization codeupdating ..updated initialization location address.	generating at least one key for the integrated system;
Claim 9: ...method of initializing secure operation loading encrypted initialization code of an integrated system, said method comprising :	loading initial code into the integrated system, the
generating at least one key for the integrated system;	loading including using the at least one key to encrypt the initial code via a data access control function of the integrated system; and

<p>loading initialization code into the integrated system, the loading including using the at least one key to encrypt the initialization code via the data access control function of the integrated system.</p> <p>Claims 17 and 22 (limitations similar to that in claims 4 and 9)</p>	<p>reinitializing the integrated system using the encrypted initial code.</p>
<p>Claim 4: ...initialization code to be employed in initializing secure operation of the integrated system</p> <p>Claim 6: ... encrypting the decrypted initialization codeupdating ..updated initialization location address.</p> <p>Claim 9: ...method of initializing secure operation loading encrypted initialization code of an integrated system, said method comprising :</p> <p>generating at least one key for the integrated system;</p> <p>loading initialization code into the integrated system, the loading including using the at least one key to encrypt the initialization code via the data access control function of the integrated system.</p> <p>Claims 17 and 22 (limitations similar to that in claims 4 and 9)</p>	<p>14: A system of initializing secure operation of an integrated system, said system comprising:</p> <p>means for generating at least one key for the integrated system;</p> <p>means for loading initial code into the integrated system, the loading including using the at least one key to encrypt the initial code via a data access control function of the integrated system; and</p> <p>means for reinitializing the integrated system using the encrypted initial code.</p>
<p>Claim 4: ...initialization code to be employed in initializing secure operation of the integrated system</p> <p>Claim 6: ... encrypting the decrypted initialization codeupdating ..updated initialization location address.</p> <p>Claim 9: ...method of initializing secure operation loading encrypted initialization code of an integrated</p>	<p>27: At least one program storage device readable by a machine embodying at least one program of instructions executable by the machine to perform a method of initializing secure operation of an integrated system, said method comprising:</p> <p>generating at least one key for the integrated system;</p>

<p>system, said method comprising :</p> <p>generating at least one key for the integrated system;</p> <p>loading initialization code into the integrated system, the loading including using the at least one key to encrypt the initialization code via the data access control function of the integrated system.</p> <p>Claims 17 and 22 (limitations similar to that in claims 4 and 9)</p>	<p>loading initial code into the integrated system, the loading including using the at least one key to encrypt the initial code via a data access control function of the integrated system; and</p> <p>reinitializing the integrated system using the encrypted initial code.</p>
<p>Claim 10. The method of claim 9, wherein the generating comprises generating within the integrated system the at least one key.</p> <p>Claim 11. The method of claim 9, further comprising loading additional code into the integrated system using the encrypted initial code.</p> <p>Claim 12. The method of claim 12, wherein the loading additional code includes utilizing the encrypted initial code to implement random key generation within the integrated system for use in encrypting the additional code by the data access control function.</p> <p>Claim 13. The method of claim 9, wherein the loading further includes encrypting the initial code using the at least one key and a memory address for whitening.</p>	<p>2. The method of claim 1, wherein the generating comprises generating within the integrated system the at least one key.</p> <p>3. The method of claim 1, wherein the data access control function comprises a hardware component of the integrated system.</p> <p>4. The method of claim 1, further comprising loading additional code into the integrated system using the encrypted initial code.</p> <p>5. The method of claim 4, wherein the loading of additional code includes utilizing the encrypted initial code to implement random key generation within the integrated system for use in encrypting the additional code by the data access control function.</p> <p>6. The method of claim 1, wherein the loading further</p>

Claims 23-26 (limitations similar to that in claims 10-13)	includes encrypting the initial code using the at least one key and a memory address for whitening.
<p>Claim 10. The method of claim 9, wherein the generating comprises generating within the integrated system the at least one key.</p> <p>Claim 11. The method of claim 9, further comprising loading additional code into the integrated system using the encrypted initial code.</p> <p>Claim 12. The method of claim 12, wherein the loading additional code includes utilizing the encrypted initial code to implement random key generation within the integrated system for use in encrypting the additional code by the data access control function.</p> <p>Claim 13. The method of claim 9, wherein the loading further includes encrypting the initial code using the at least one key and a memory address for whitening.</p> <p>Claims 23-26 (limitations similar to that in claims 10-13)</p>	<p>15. The system of claim 14, wherein the means for generating comprises means for generating within the integrated system the at least one key.</p> <p>16. The system of claim 14, wherein the data access control function comprises a hardware component of the integrated system.</p> <p>17. The system of claim 14, further comprising means for loading additional code into the integrated system using the encrypted initial code.</p> <p>18. The system of claim 17, wherein the means for loading of additional code includes means for utilizing the encrypted initial code to implement random key generation within the integrated system for use in encrypting the additional code by the data access control function.</p> <p>19. The system of claim 14, wherein the means for loading further includes means for encrypting the initial code using the at least one key and a memory address for whitening.</p>

Regarding claims 1-6, 14-19 and 27, although the conflicting claims are not identical, they are not patentably distinct from each other because the new limitations would have been obvious over the parent application. Difference between the conflicting claims of the instant application and the conflicting claims of the commonly owned patent is that the commonly owned patent does not disclose limitation such as reinitializing the integrated system using the encrypted initial code, however, these limitations are obvious in view of the teachings set forth in the claims 4,6, 17 and 19 of the commonly owned US patent.

This is an obviousness –type double patenting rejection.

5. Claims 8-10, 13 , 21-23 and 26 are provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 4, 6, 9-11,19 and 22-26 of the commonly owned US Patent 6715085 B2 in view of Taylor (US 6971051).

Patent US 6715085 B2	Instant Application
Claim 4:initialization code to be employed in initializing secure operation of the integrated system	8. ...loading initialization code into the integrated system at a secure physical location.
6. The method of claim 5, wherein the updated level of software comprises an initialization code update, and wherein the method further includes: authenticating and decrypting the initialization	9. The method of claim 8, wherein the loading of initialization code further comprises loading unencrypted initialization code into the integrated system, including restoration initialization code, and wherein the method further comprises: executing the restoration initialization code to obtain a

<p>code update;</p> <p>encrypting the decrypted initialization code</p> <p>update with a master key set maintained by the data access control function and a new version number;</p> <p>updating an initialization re-direction address maintained by the data access control function to a new, updated initialization location address.</p> <p>9. A method of initializing secure operation of an integrated system, said method comprising:</p> <p>generating at least one key for the integrated system;</p> <p>loading initial code into the integrated system, the loading including using the at least one key to encrypt the initial code via a data access control function of the integrated system; and</p> <p>reinitializing the integrated system using the encrypted initial code.</p> <p>Claim 10. The method of claim 9, wherein the</p> <p>generating comprises generating within the integrated system the at least one key.</p> <p>Claim 11. The method of claim 9, further comprising</p> <p>loading additional code into the integrated system</p> <p>using the encrypted initial code.</p>	<p>master key and a substitute initialization address;</p> <p>encrypting the restoration initialization code with the master key and</p> <p>storing the encrypted initialization code at the substitute initialization address; and</p> <p>reinitializing the integrated system using the stored encrypted initialization code at the substitute initialization address.</p> <p>10. The method of claim 9, further comprising storing the master key and the substitute initialization address in persistent storage associated with a data access control function of the integrated system.</p>
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Claims 19, 22-26 (limitations similar to that in claims 4,6,9-11)	Claims 21-23
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Regarding claims 8-10, 13, 21-23 and 26, although the conflicting claims are not identical, they are not patentably distinct from each other because the new limitations would have been obvious over the parent application. Difference between the conflicting claims of the instant application and the conflicting claims of the commonly owned patent is that the commonly owned patent does not disclose limitation such as automatically establishing a reduced level of functionality in the integrated system, and allowing a full functional recovery. However, Taylor et al teaches these limitations (see abstract; Fig 5; Col 2, starts at line 46; Claims 4-5).

Taylor and the co-owned US patent are analogous art because they are from the same field of secure system reinitializing. At the time of invention, it will be obvious to a person with ordinary skill in the art to combine the teaching of Taylor with the co-owned US patent to design a method comprising establishing a reduced level of functionality in the integrated system, and allowing a full functional recovery in order to prevent unauthorized access to the system once tampering is detected.

This is an obviousness –type double patenting rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if

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the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 7 and 20 and 28 are rejected under 35 USC 102 (e) as being anticipated by Taylor et al (US 6971051 B2).

Regarding claims 7,20 and 28, Taylor et al discloses a method/system/ device of recovering integrated system functionality following a trigger event, said method comprising:

automatically establishing a reduced level of functionality within the integrated system (Col 6, starts at line 4; Claims 4-5; selectively reinitializing would essentially results in reduced level of functionality); and

allowing for full functional recovery of the integrated system by employing a selective recovery procedure (Col 4, starts at line 65; Col 6, starts at line 4).

Allowable Subject Matter

7. ***Regarding claims 11-12 and 24-25,*** they are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


8. A shortened statutory period for response to this action is set to expire in 3 (Three) months and 0 (Zero) days from the mailing date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C 133, M.P.E.P 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shanto M Z Abedin whose telephone number is 571-272-3551. The examiner can normally be reached on M-F from 9:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moazzami Nasser, can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shanto M Z Abedin
Examiner, AU 2136

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8,29,07